

Listing of Claims:

Claim 1 Cancelled
Claim 2 Cancelled
Claim 3 Cancelled
Claim 4 Cancelled
Claim 5 Cancelled
Claim 6 Cancelled
Claim 7 Cancelled

Claim 8 (Thrice Amended) A plate heat exchanger block comprising: an aluminum or aluminum alloy housing, at least partly within said housing a plurality of aluminum or aluminum alloy sheets (2) of at least partially corrugated metal arranged parallel to one another and forming a plurality of heat-exchange passages, at least one steel header (3) in communication with at least some of the heat-exchange passages, wherein at least two parts (1, 2, 3) of the plate heat exchanger block consist essentially of aluminum metallic materials that cannot be welded to one another, and wherein the plate heat exchanger block includes an intermediate piece (5) between the header (3) and the heat exchange passages (2) containing the plurality of sheets, the intermediate member having a steel part facing the header and an aluminum part facing the housing, the parts being explosively bonded together wherein the intermediate piece is welded, aluminum-to-aluminum or aluminum alloy, to at least one of (a) the housing and (b) the corrugated sheets and is also welded steel-to-steel with the steel header.

Claim 9 Cancelled
Claim 10 Cancelled
Claim 11 Cancelled

Claim 12 (Previously Presented) A plate heat exchanger according to claim 8, wherein sheets (2) consist essentially of aluminum.

Claim 13 (Previously Presented) A plate heat exchanger according to claim 8, wherein header (3) consists essentially of steel.

Claim 14 Cancelled

Claim 15 Cancelled

Claim 16 (Previously Presented) A heat exchange header for attachment to a heat exchanger having aluminum components, the heat exchange header consisting essentially of steel and including a connecting piece having first and second sides, the connecting piece consisting essentially of steel on one side and consisting essentially of aluminum the other side, the aluminum of the connecting piece being explosively bonded to the steel of the connecting piece, said header being welded to the steel side of said connecting piece.

Claim 17 (Previously Presented) The plate heat exchanger block of claim 8 wherein the housing has an inlet opening of a selected area and wherein the header has a corresponding outlet area, the intermediate piece disposed therebetween also enclosing a corresponding area

Claim 18 Cancelled

Claim 19 (Previously Presented) A method of fabricating a heat exchanger block including a housing with a plurality of plates therein and a header which is in communication with the plates within the housing, the housing and header having openings, the method comprising:

 fabricating at least the plates of aluminum;

 fabricating an intermediate member for positioning between the header and the plates within the housing by explosive plating aluminum and steel components together to form the intermediate member, the intermediate member having an opening and the housing and header having openings;

 welding the steel component of the intermediate member to the header with the

openings aligned; and

welding the aluminum component to the heat exchanger block with the openings aligned.

Claim 20 (Previously Presented) The method of claim 19 wherein the intermediate member is first welded to the header and thereafter the intermediate member is welded to the heat exchanger block after the header attached to the intermediate member.

Claim 21 (Previously Presented) The method of claim 20 wherein the housing is made of aluminum and the intermediate member is welded to the housing.

Claim 22 (Previously Presented) The method of claim 20 wherein the intermediate member is welded to the plates.

Claim 23 (Previously Presented) The method of claim 19 wherein the intermediate member is first welded to the header and thereafter the intermediate member is welded to the heat exchanger block after the header attached to the intermediate member.

Claim 24 (Previously Presented) The method of claim 19 wherein the intermediate member is welded to the plates.